

Date: Tuesday, 15/07/2008 10:52:00 AM
 User: Julie Lecocq

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	212/205 HIGH AFT X-TUBE ASSEMBLY
Job Number :	40508		
Estimate Number :	10257		
P.O. Number :		Part Number :	D212664201
This Issue :	15/07/2008	S.O. No. :	
Prsht Rev. :	NC	Drawing Number :	D212-664-241 REV C
First Issue :	1/1	Project Number :	N/A
Previous Run :	40507	Drawing Revision :	C
Written By :		Material :	
Checked & Approved By :	<u>JLD 08-15-08</u>	Due Date :	05/08/2008
Comment :	Est Rev:E 04.02.16 Reformat K/DS Est Rev:F 06-03-29 Remove Comments on Pick List JLM Est Rev:G 07-04-30 As per Rev C JLM Est Rev:H 08-05-22 up date Qty of rubber cushion DD verified by:EC		

Qty: 1 Um: Each

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D212-664-201CHG003

S 08/08/07

2.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

3.0	D212664201TRN	Crosstube Turning Detail
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

CROSSTUBE TURNING DETAIL

batch B40340

EL 8-7-30

4.0	BENDING	BENDING MACHINE - SKIDTUBES
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Comment: BENDING MACHINE

Bend tube as per Dwg D212-664-241 using CNC bender program 212-af and Folio FT007

EL 8-7-30

5.0	QC15	DIMENSIONAL CHECK OF X-TUBES
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Comment: DIMENSIONAL CHECK OF X-TUBES

106073661

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 15/07/2008 10:52:00 AM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 40508

Part Number: D212664201

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

CROSSTUBES

CROSSTUBES RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Drill pilot holes in tube as per Dwg D212-664-241 using drill Jig DT8550 & DT8551

2-Ream hole to finish size in tube as per Dwg D212-664-241 using drill Jig DT8550 & DT8551. Check dimensions between holes, both sides on both cuffs, to ensure alignment with saddle holes.

3-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D212-664-241

4-Scribe part # and batch # using vibrating stylus as per Dwg D212-664-241

SL 8-7-30

AWM
8-7-30

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1 within 24 hours of bending and drilling

AWM 8-7-31

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

5 08/7/31 (P)

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

8 08/7/31 (P)

10.0

OUTSIDE SERV.10

OUTSIDE SERVICES -skids



Comment: Sub-Contracting OUTSIDE SERVICES

Liquid Penetrant Inspection as per QSI 038

Issue P/O: 6864

LPI as per ASTM 1417 Level 2

Attach copy of NDT results to work order

08/08/05

(1)

11.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Inspect for transit damage Ensure copy of NDT results attached to work order.

12/8/5

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 15/07/2008 10:52:00 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 40508

Part Number: D212664201

Job Number:



Seq. #:

Machine Or Operation:

Description :

18.0

CROSSTUBES

CROSSTUBES RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1- Lightly scuff the bonded area using a 320 grit sand paper and clean the area with 41058 wash 'n' wipe

2-Install supports with magnobond as per QSI 015 Adhere for for 12 Hrs

A/R 6398 Magnobond

Batch: 107621

Expiry Date: 08/2009 Time: 1:15 pm

3-Install clamps as per Dwg D212-664-241. Torque clamps to 80-100 in lb.

ml
08 08 06 ①

ml 08 08 07 ①

19.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08.08.07 ①

20.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

21.0

D34281

Placard



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Placard

Batch:

39322

JS 08/08/07 ①

22.0

AN640A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Bolt

Batch:

M67971

JS 08/08/07 ①

23.0

AN641A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Bolt

Batch:

M67013

JS 08/08/07 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 15/07/2008 10:52:00 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 40508

Part Number: D212664201

Job Number:



Seq. #:

Machine Or Operation:

Description :

24.0

AN960JD616

Washer



Comment: Qty.: 18.0000 Each(s)/Unit Total : 18.0000 Each(s)

Washer

Batch:

M107959

AS 08/08/07 (X)

25.0

MS21042L6

Nut



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Nut

Batch:

M165077

AS 08/08/07 (X)

26.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

08/08/07 (X)

27.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Identify and pack for shipping as per PPP D212-664-201

D 08/08/07 (X)

28.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/08/08 (1)

MF 08-08-08

Job Completion



32

Date: Tuesday, 15/07/2008 10:52:00 AM
 User: Julie Lecocq

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services
 Job Number : 40508
 Estimate Number : 10257
 P.O. Number :
 This Issue : 15/07/2008 S.O. No. :
 Prsht Rev. : NC
 First Issue : / / Type : CROSSTUBES
 Previous Run : 40507
 Drawing Name : 212/205 HIGH AFT X-TUBE ASSEMBLY
 Part Number : D212664201
 Drawing Number : D212-664-241 REV C
 Project Number : N/A
 Drawing Revision : C
 Material :
 Due Date : 05/08/2008 Qty: 1 Um: Each

Written By : JUL 08.15.08

Checked & Approved By : JUL 08.15.08
 Comment : Est Rev:E 04.02.16 Reformat K/DS

Est Rev:F 06-03-29 Remove Coments on Pick List JLM

Est Rev:G 07-04-30 As per Rev C JLM

Est Rev:H 08-05-22 up date Qty of rubber cushion DD verified
 by:EC

REFERENCE ONLY

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



JUL 08.8.07



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D212-664-201CHG003

2.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

3.0 D212664201TRN Crosstube Turning Detail



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

CROSSTUBE TURNING DETAIL

batch _____

4.0 BENDING BENDING MACHINE - SKIDTUBES



Comment: BENDING MACHINE

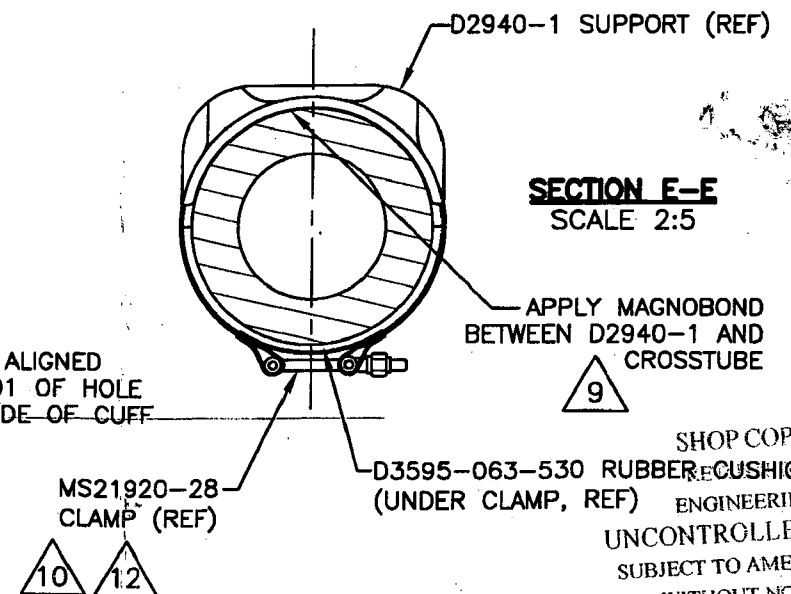
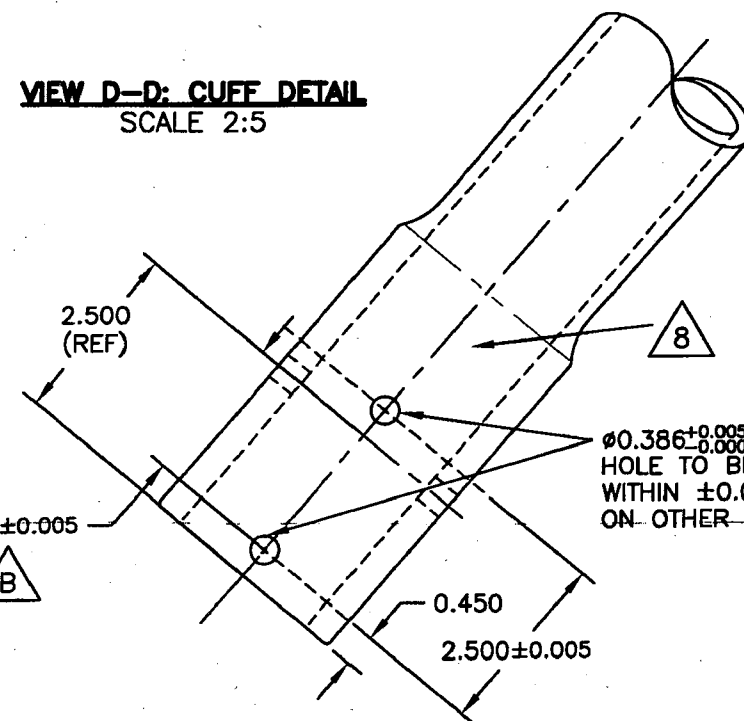
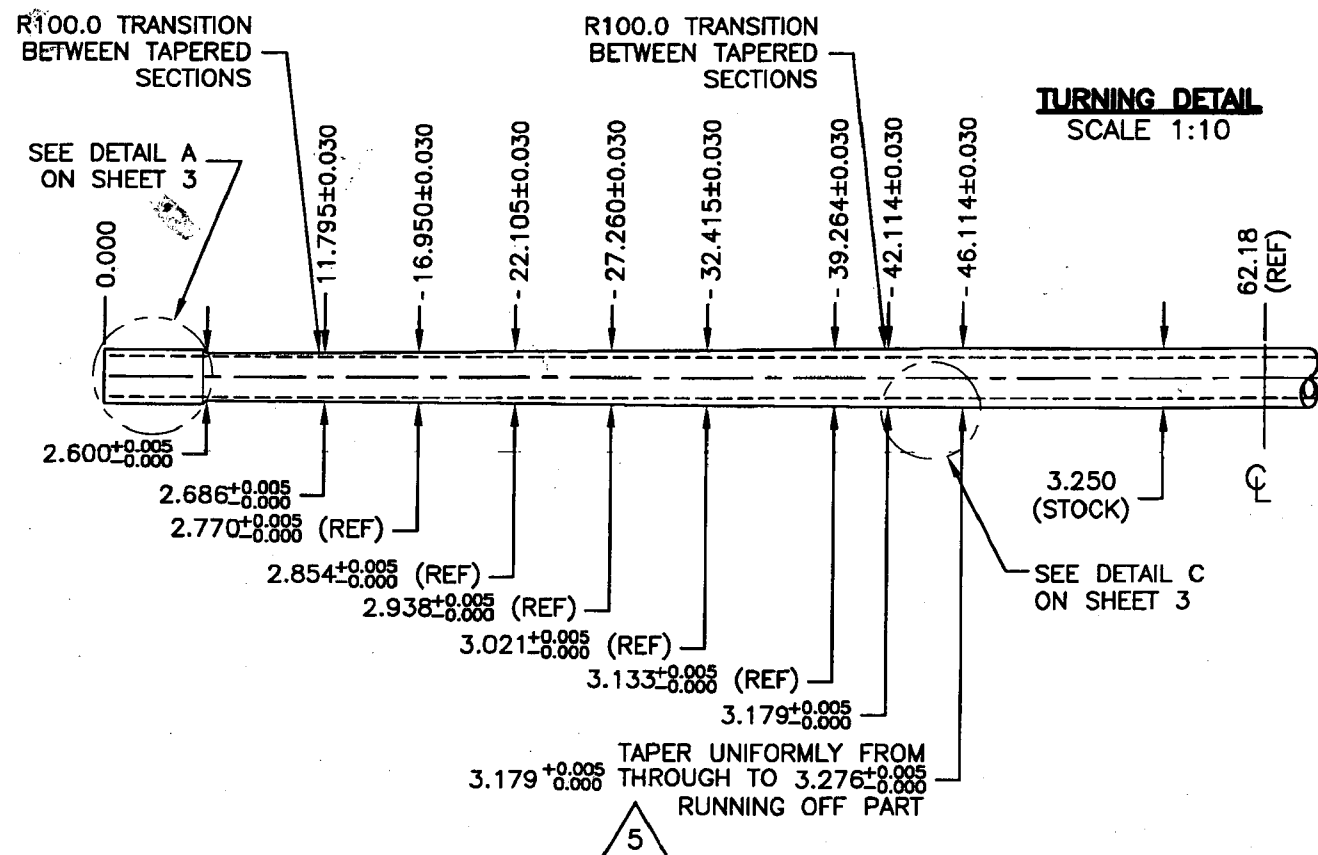
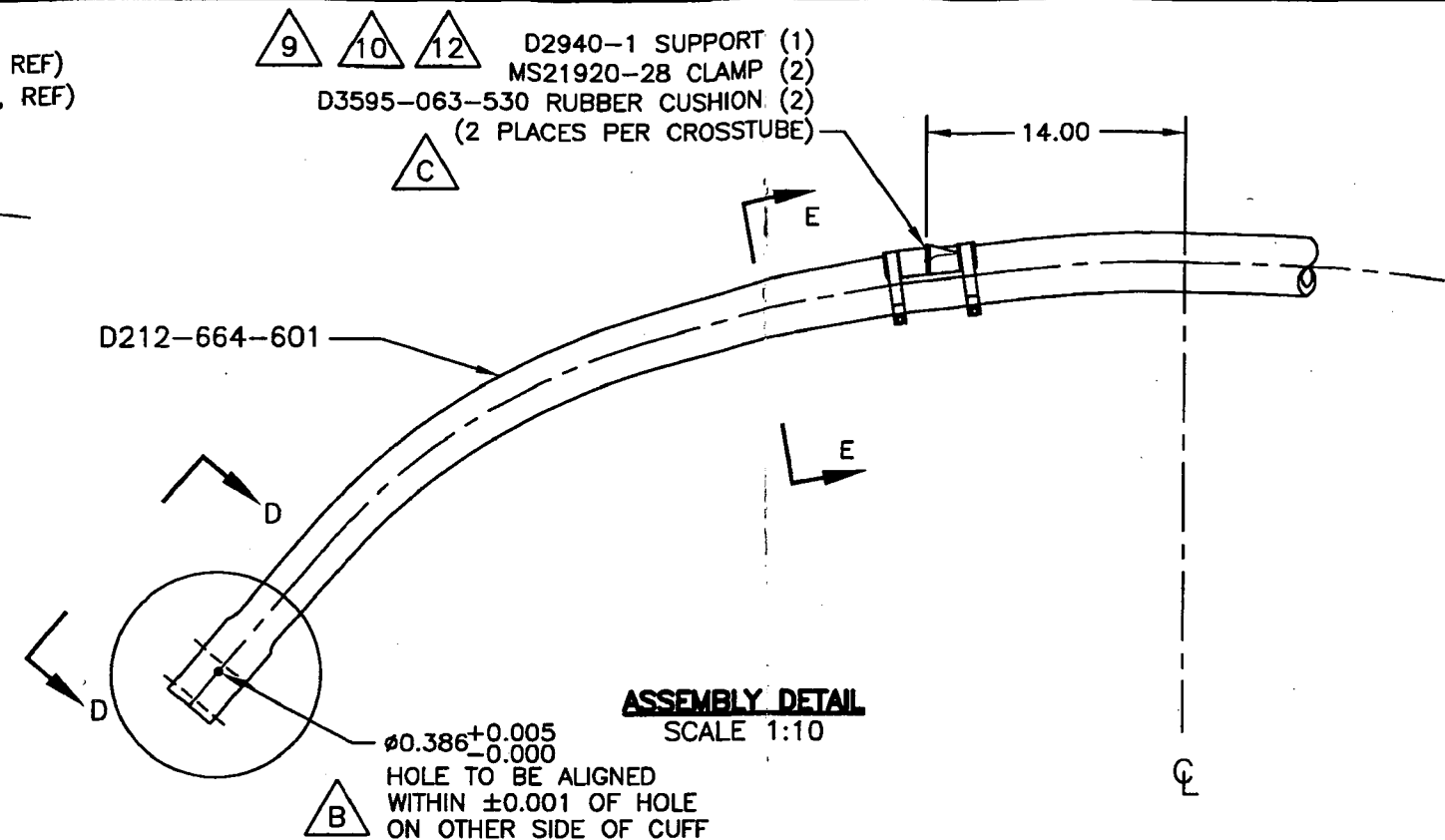
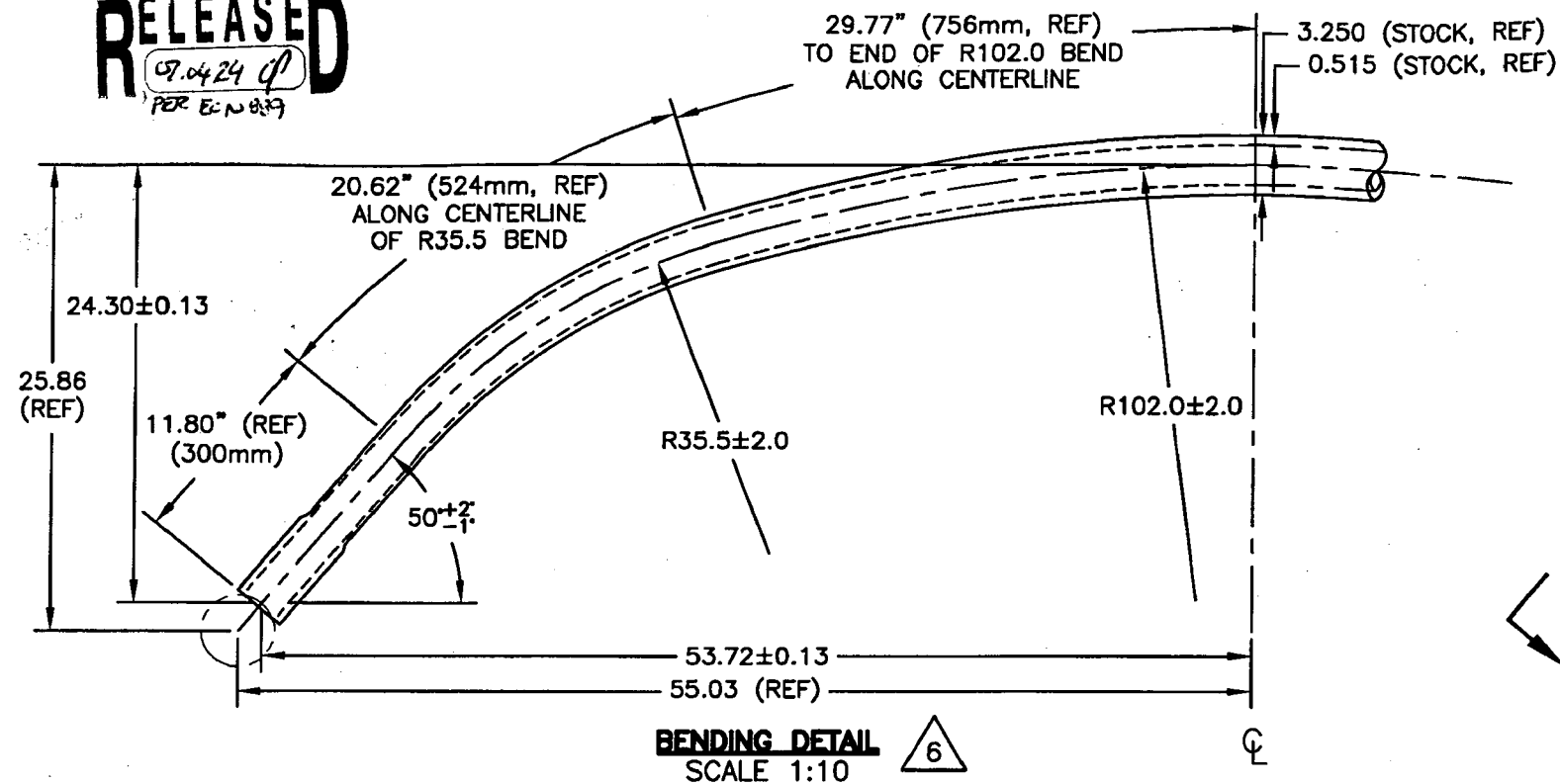
Bend tube as per Dwg D212-664-241 using CNC bender program 212-af and Folio FT007

5.0 QC15 DIMENSIONAL CHECK OF X-TUBES



Comment: DIMENSIONAL CHECK OF X-TUBES

RELEASED
7.04.24
PER E.N. 8.19



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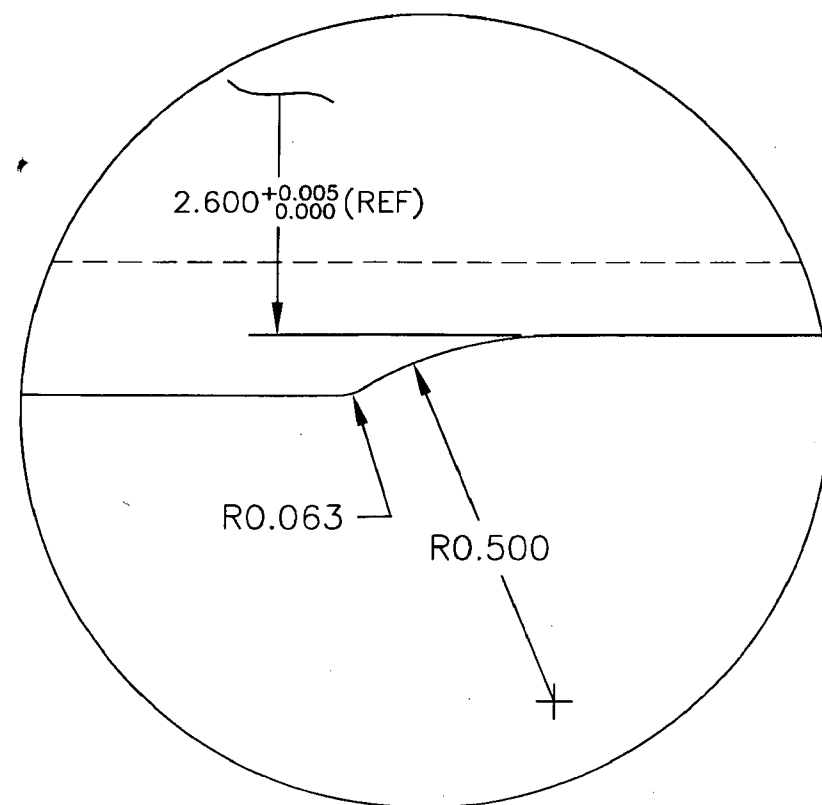
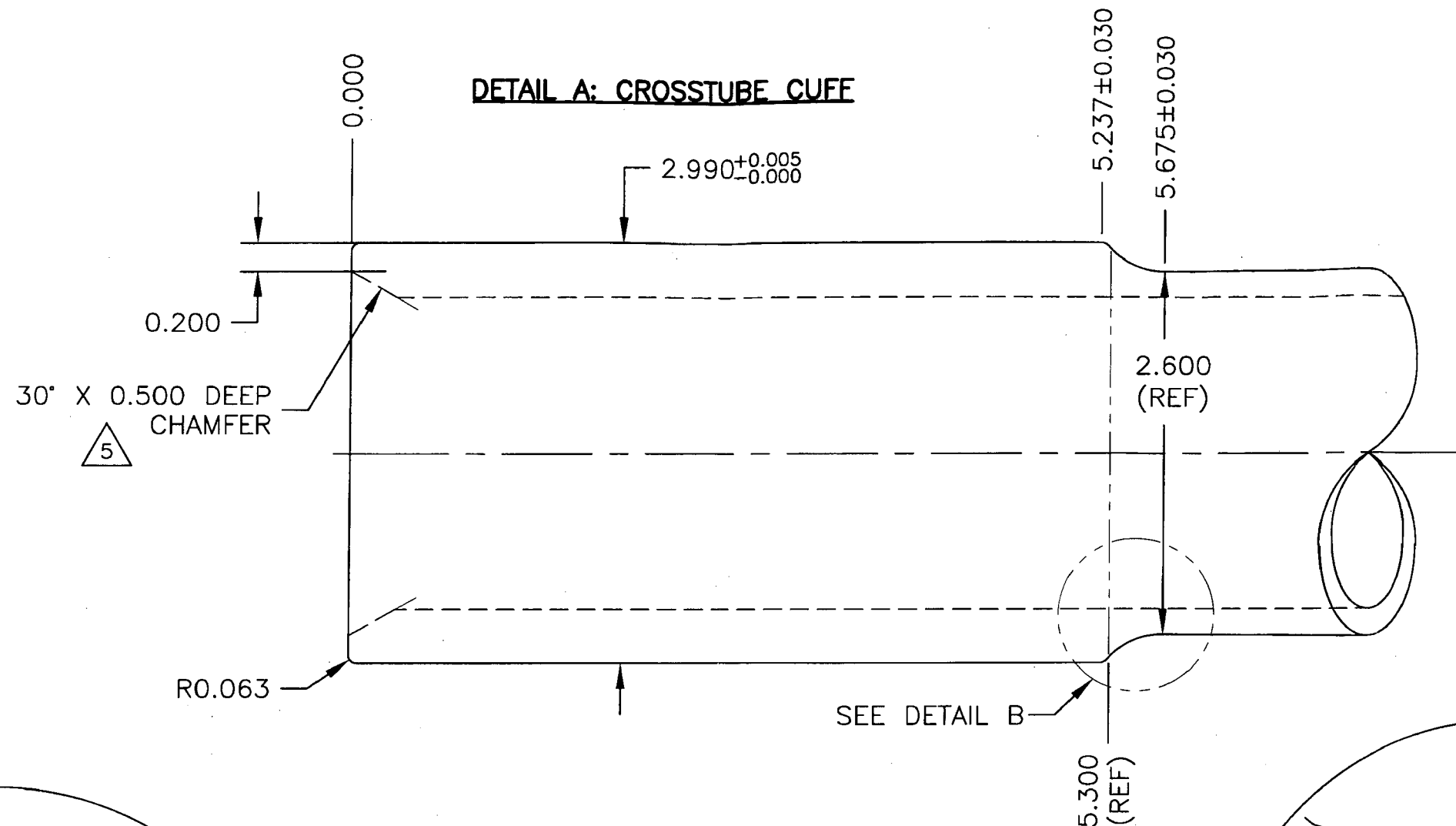
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CHECKED J	APPROVED A	DRAWING NO. D212-664-241	REV. C SHEET 2 OF 3
DATE 07.03.08	TITLE CROSSTUBE ASS'Y (205/212 HI AFT)	SCALE 1:10	

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WITHOUT NOTICE
WORK ORDER
NO. 40508

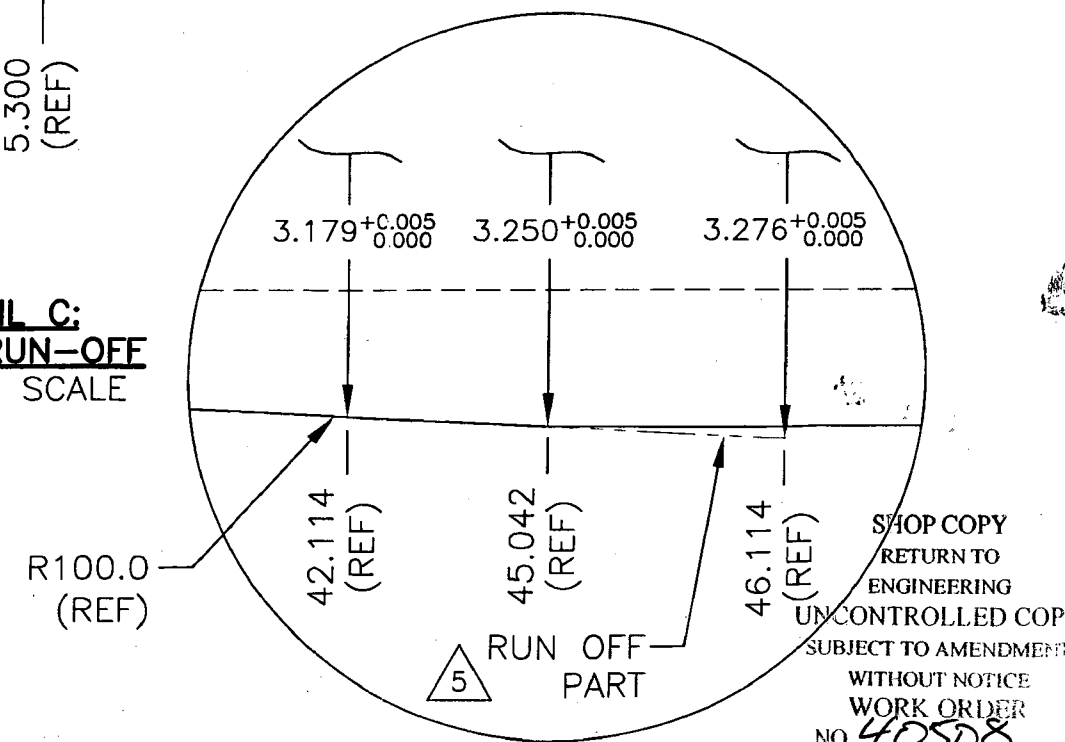
RELEASED
07.04.24
PER ECN 889

DETAIL A: CROSSTUBE CUFF



DETAIL B: CUFF
TRANSITION
SCALE 4:1

DETAIL C:
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HAWKESBURY, ONTARIO, CANADA

CHECKED

APPROVED

DRAWING NO.
D212-664-241

REV. C
SHEET 3 OF 3

DATE

TITLE

SCALE

07.03.08

CROSSTUBE ASS'Y (205/212 HI AFT)

1:1

